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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/797,278

03/10/2004

Daniel Reis

REIS2

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Browdy and Neimark, PLLC  
1625 K Street, N.W.  
Suite 1100  
Washington, DC 20006

EXAMINER

BROWN, MICHAEL A

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/797,278	<b>Applicant(s)</b> REIS ET AL.	
	<b>Examiner</b> MICHAEL BROWN	<b>Art Unit</b> 3772	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,7,8,10,12-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,8,10,12-18,22 and 23 is/are rejected.
- 7) ☒ Claim(s) 19, 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 12, 14-15 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Nicoll.

Nicoll discloses in figures 1-4 a splint for immobilizing and supporting a body part of a human, wherein the splint comprises an inflatable main body part 20, structured to fit a shape and structure of a body part (the user's leg), to be immobilized being composed of a leg having a curvature, a foot, an ankle and a heel, the inflatable main body comprising integrally made parts, which include leg parts (the outer ends of 20 extending away from the center of 20), for holding left and right sides of the leg, a part for wrapping a back of the leg (the curved portion of 20 in figures 1-2, extending along the leg of the user, wraps around the back part of the leg), and a foot part (the lower end of 20 in fig. 1 along with 24), for wrapping ankles and sole portions of the foot, to cover the body part (the leg, ankle and foot), from three sides (fig. 1, the lacing is used to close the three sides around the leg), leaving one side uncovered, the shape of the shape of the inflatable main body defining a curvature (the curvature of the splint is located around the back of the user's leg and extends to the sole of the foot), corresponding to the foot part of the leg between the ankle and sole portions, the inflatable main body comprising inflatable tubes (34a-34d), for achieving variable

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degree of support, stiffness and restriction of movement, the inflatable main body being made of a flexible material (col. 2, lines 25-30), having two opposed edges (fig. 2), wherein the shape of the inflatable main body and arrangement of the inflatable tubes with the integrally made parts of the main body being such that the tubes are inflated, the main body takes up the shape of the leg to provide maximum compatibility and preventing pressure to the heel (are intended use), at least one gas pressure source (pump, 30. 4, lines 55-60), connected to the splint, at least one adjustable member 25, for connecting the two opposed edges together across the uncovered side of the body part in a manner to allow adjustment of the pressure and tightness of the splint on the body part, the tightness of the splint on the body part is controlled by the fastening and loosening of the adjustment member (fastening and loosening of the lacing controls the tightness of the splint), the pressure of the splint is controlled by a valve 60, the adjustable member is detachable (the lacing can be removed), the inflation of the inflatable tubes fits the structure of the inflatable main body to the structure of the three sides of the body part covered by the inflatable main body and the inflatable main body is shaped to follow closely the shape of the body part when inflated (fig. 1).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 7-8, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicoll in view of Dye.

Nicoll discloses in figures 1-4 a splint substantially as claimed. However, Nicoll, the splint being made of two layers of nylon which are jointed by soldering means and coated with polyurethane or an adjustment member that is strap made of velcro. Dye teaches in figures 1-7 a splint comprising two layers of nylon (polyester) joined by a soldering means (heat sealing) and a polyurethane coating (a polymer) and an adjustment strap made of Velcro. It would have been obvious to one having ordinary skill in the art at the time that the invention was made the nylon material would allow the splint to expand to fit different user. The polyurethane would protect the nylon and make the splint more durable. It is old and well known that polyurethane is a polymer. The Velcro could be substituted for the lacing because either device can be used to fasten the ends of the splint together.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims above, and further in view of Porrata.

Porrata teaches in figure 1 a splint comprising a pressure source that is a hand pump 26. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the hand pump as taught by Porrata could be substituted for the pump disclosed by Nicoll because both inflatable sources are interchangeable.

Claims 13 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims above, and further in view of Simons.

Simons teaches in figure 3 loops (66, 67) that act as a suspension strap. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the loops as taught by Simons could be incorporated into the splint disclosed by Nicoll and Dye in order to use the loops to suspend the device. The loops are connected to the outer edge of the device. Consequently they can be connected to the edge of the splint.

### ***Allowable Subject Matter***

Claims 19 and 21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments filed May 13, 2010 have been fully considered but they are not persuasive. Applicant argues that the splint disclosed by Nicoll would remain a flat panel after being fastening around the user's leg. However, the flat sheet still has three side (the back covers the back of the leg, and the left and right side of 20 covers the left and right side of the leg). Thus, the inflatable main body 20 conforms to the leg. Applicant argues that the splint is not design to fit the body part. However, the splint disclosed by Nicoll fits the leg. The inflatable tubes (34a-34d) restrict movement of the leg. Note all arguments pertaining to the ventilation holes are moot because claim 21, which recites the ventilation holes has been indicated as an objected to claim that would be allowable if placed into independent form with claim 1.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL BROWN whose telephone number is (571)272-4972. The examiner can normally be reached on 5:30 am-4:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on 571-272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Brown/  
Primary Examiner, Art Unit 3772